



Pilgrims plunge into the water holy Ganges river in the early morning, Wikimedia, Piyush, released under a Creative Commons Share-Alike 4.0 license

Chapter 14

‘Absent–Present’ Heritage: The Cultural Heritage of Dwelling on the Changjian (Yangtze) River



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Abstract Drawing upon post-structuralist theories of heritage and Derridian theory in particular, this chapter examines the idea of ‘absent–present’ heritage: heritage that is non-existent, but whose trace remains in the present in a social, memorial and sometimes physical way. Exploring this theoretical approach to heritage, this chapter examines cultures of dwelling on and alongside the Yangtze River. Empirically, it examines the histories and contemporary status of floating fields, sampans and tracking on the Yangtze; treating these social material entities as absent–present heritage, it ends with a discussion of augmented reality as a new digital technology that could allow for the conservation of this heritage. It is also suggested here that such conservation practices might offer space for critical reflection.

Keywords Absent–present heritage · Dwelling · Floating fields · Sampans · Tracking · The Yangtze

Introduction

In the following writing, we view heritage as a series of multiple cultural thematics and/or an assemblage; heritage is a becoming, a constellation of social relations where powerful and powerless agents, quotidian actors and conservation institutions come together to demark particular social and material sites. Heritage is not a given but is the product of a long series of relations and relationships that enable it to exist. This chapter rejects the idea that there is anything like an asocial heritage which exists beyond the meaning that humans give it (beyond time and space). Moreover, by taking a mainly processual ontological stance, we also suggest that what is regarded as heritage is also subject to change over time and space; heritage

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is only heritage for the time being and what is considered heritage at one moment might be disregarded as heritage in another. Drawing upon the material aspects of a theory of heritage developed by Harrison (2013), we also contend that heritage cannot be solely understood as a socially constructed concept; indeed, as Harrison suggests (particularly through the work of Barad 2003, 2007), heritage must be understood as a mutual becoming of meaning (discourse) and materiality (Harrison 2013). From the inscription of ancient buildings to the inscription of Tango on the Intangible World Heritage list, heritage involves materialities (of architecture, of bodies). Concepts of heritage are subject to power relations which select, filter and/or negate multiple discourses of history. The act of demarcating a time and space as 'heritage' is therefore to acknowledge and to give value to particular histories and spaces over others.

This chapter unpacks these theoretical ideas of heritage through the notion of absent–present heritage: heritage which is non-existent, but whose presence remains in the present. Specifically, we explore those cultures of dwelling on and alongside the Changjiang or Yangtze River.

In recent years, a number of articles, papers and books have been written with concerns for the 'loss' of the natural and cultural heritage of the Changjiang or Yangtze River in China (see for instance, Turvey 2008; Zhang et al. 2008; Courtney 2017a); the loss of natural heritage has been associated particularly with the depletion of wildlife within and around the river, including the catastrophic extinction of the Baiji dolphin, which has gained international attention (Turvey 2008). Alongside these debates, scholars have reported on the extensive social and physical damage done to particular parts of the Yangtze as a result of the Three Gorges Dam and other interventions into the environment (see for instance Qing 1998; Murray and Cook 2002; Hvistendahl 2008). Some of this academic commentary has focused on the problematic mass resettlement of people in the excessive reconstruction of the landscapes of the river (Murray and Cook 2002: 103; International Rivers Network report 2003).

In evaluating these various environmental shifts, this chapter supports current calls for the conservation of nature, natural settings and communities within and around the Yangtze. But it also argues that more needs to be done to document and protect the 'absent–present' cultural heritage of the river; drawing upon post-structuralist and Derridian theory in particular, this chapter defines absent–present heritage as that heritage which relates to legacies, ghosts, memories, remembrances and shadows of practices; in other words, this chapter deals with heritage which has ceased to exist in the present, but whose traces haunt the present. Specifically, this writing examines a series of intangible dwelling practices associated with the river. While many of these practices now cease to exist, an absent–present culture and heritage of dwelling remain on and alongside the Yangtze, as many original traditions and practices of dwelling have been reconfigured and re-established within new cultural and economic frameworks. Drawing upon alternative conservation approaches, it is claimed then that more needs to be done to 'conserve' these legacies; however, rather than simply reviving the past, as an act of synthetic nostalgia, it is contended that new forms of digital and augmented reality based conservation (associated with

historical texts and particular sites along the river) might allow for new forms of memorial conservation.

A History of Environmental–Human Decline on the Changjiang (Yangtze) River

The environmental problems of the current Yangtze River—including flooding, pollution, the loss of wildlife and the displacement of communities—do not have their roots in contemporary history (although the contemporary moment has certainly exacerbated environmental issues on and alongside the river); rather, the river and its surrounding environment have been subject to climate change and intense human interventions that can be traced back to prehistory and the medieval period in particular (Turvey 2008; Zhang et al. 2008; Courtney 2017a). As Turvey has suggested: ‘a medieval economic revolution more than a thousand years ago led to further increase in population growth, deforestation and intensive rice farming across the Yangtze Basin; some cities had by now already reached populations of over a million inhabitants and timber shortages began to be reported from across the region’ (Turvey 2008: 19). Turvey notes that the Qing dynasty (1644–1912) saw a ‘population explosion during the eighteenth and nineteenth centuries’ with the result that many flood plains were converted into agricultural land (Turvey 2008: 19). Thus, by the late imperial period, the Yangtze area suffered increased soil erosion with sediment running off the land and into the river; environmental processes which, in turn, expanded the delta; the area also underwent significant changes to rainfall and water quality (Turvey 2008: 19). Courtney has claimed that the ‘ultimate cause[s]’ of the great flood of 1931—which claimed an estimated 2 million lives—were ‘excessive deforestation, wetland reclamation and the over-extension of river dyke networks’ (Courtney 2017a). Thus, longitudinal patterns of human intervention into the Yangtze have had long-term impacts on the environment well into the present. [See the work of Turvey, Courtney and others. Courtney recently asserted that flooding along the Yangtze might also be regarded as a form of heritage in itself (2017b)].

Another cause of great change in the environmental conditions of the Yangtze has been intense deforestation, particularly of the upper Yangtze Basin (Waugh 2003: 293; see also Murray and Cook 2002: 100–104). As Wisner et al (2004) have pointed out, since ‘1985 it is estimated that forest cover in the Yangtze Basin has fallen by 30 per cent’ (Wisner et al 2004: 181). One result is that ‘soil erosion has increased, so that silt levels have increased markedly’ (Murray and Cook 2002: 100; 104). Cumulative deforestation has been connected to flooding, including the major flood of 1998; as Kram et al. (2012) have contended ‘The flood, China’s worst in 44 years, drowned more than 4000 people and rendered 14 million homeless... [B]ecause 85% of the Yangtze River Basin had been logged, monsoon rainfalls coursed relatively freely towards the river’ (Kram et al. 2012: 15).

As well as flooding, there has been a general shift in the environmental and cultural landscapes of the Yangtze; in her extensive photographic work along the Yangtze (2000–2003), artist and photographer Linda Butler has commented on the extensive ‘transformation of the landscape’: ‘buildings, roads, bridges and whole cities had begun to sprout high on the hillsides. Simultaneously, the old cities and villages were being dismantled and the materials—the floor slabs, rebar and bricks—were reused’ (Butler 2004: 2). The growth of industrial pollution, fishing, netting, damming and boating—vessel traffic has had a negative effect on the water quality and biodiversity of the area (Turvey 2008: 35–40; Hays 2009; Dandan 2014; *The Guardian* 2014; World Wildlife Fund 2017; Water Policy International nd.). Turvey has pointed in particular to the onslaught of ‘huge quantities of untreated water, loaded with industrial and agricultural pollutants, sewage and other waste products’ which have been continuously pouring into the river (Turvey 2008: 35). Though it is difficult to know when this started, he suggests that by ‘1985, wastewater emissions along the river totalled almost 130 billion tons’ (Turvey 2008: 35). The results have been catastrophic, with the death of marine animals (including the Baiji dolphin) and inestimable risks to human health. As Turvey attests, ‘levels of stomach cancer and cancer of the oesophagus, thought to be caused by drinking polluted water and eating polluted Yangtze fish, are on the increase in communities along the river’ (Turvey 2008: 205; see also Guang 2010).

But of all the negative human interventions on the Yangtze, the Three Gorges Dam (constructed in the 1990s) has been perhaps the most severe. The Dam has elicited strong reactions from environmentalists, activists, academics and locals living alongside it (Qing 1998; Chetham 2002; Butler 2004; Hvistendahl 2008). Environmentalists have noted that it has increased the potential for landslides, earthquakes and the risk of water-borne diseases (Butler 2004; Hvistendahl 2008). Observers have also pointed to the immense human costs of the project; as Hvistendahl (2008, but writing before the Dam was constructed in 1994) has explained: ‘To date, the government has ordered some 1.2 million people in two cities and 116 towns clustered on the banks of the Yangtze to be evacuated to other areas before construction, promising them plots of land and small stipends—in some cases as little as 50 yuan, or \$7 a month—as compensation’ (Hvistendahl 2008). The development of the dam has also submerged human settlements—at least 1000 cities, villages and towns—as well as farmland and natural resources (Hays 2011).

From Representational to Non-representational Heritage Theory: The Challenge of ‘Absent–Present’ Heritage

In recent years, post-structuralist inspired theorists have examined the idea of heritage (and conservation) in more processual terms. Rather than debating over how to ‘represent’ the heritage of people, societies and nature, writers such as Harrison (2013), Hillier (2013) and Pendlebury (2013) have started to view heritage as a

becoming and an assemblage. Drawing upon actor–network theory (ANT) (Latour 1996, 2005), assemblage theory (Deleuze and Guattari 1987; De Landa 2006) and the theory of agential realism (associated with Barad 2003, 2007), Harrison (2013) describes heritage 'as a strategic socio-technical and/or bio-political assemblage composed of various people, institutions, apparatuses (*dispositifs*) and the relations between them' (Harrison 2013: 35). Inspired particularly by the theory of agential realism, Harrison also contends that heritage can be profitably understood as a mental (discursive) and material entity; heritage does not only occur 'in the minds of humans... but involves a range of material beings who co-produce heritage as a result of their own affordances or material capabilities' (Harrison 2013: 113).

While post-structuralist assemblage theories of heritage provide a new conceptual lens, more needs to be done to understand the temporal 'presentism' of heritage. Heritage is often defined through notions of what is tangibly or intangibly 'present' in the now (especially in the listing strategies of UNESCO), with less attention paid to the 'heritage' that is absent, or that heritage which has a shadowy status in the present. There is a paucity of research on the way that some forms of heritage haunt the present. The problem with the presentism of heritage is that it often negates the traces and ghostly legacies of some cultural (or material) sites in the quest to identify and delineate other sites that are easily recognisable in the now/present. Here, the concept of hauntology in the work of philosopher Jacques Derrida is particularly interesting; in *Spectres of Marx* (1994), Derrida discusses the haunting of the neo-capitalist and/or neo-liberal moment by the ghosts of Marx. Writing in the early to mid-1990s, Derrida's point here is that despite attempts by interlocutors—such as Francis Fukuyama—and others to discuss the end of history and the triumph of capitalism (see Magnus and Cullenburg 2006), the present is always already haunted by its other (in this respect Marx). Derrida's concept of hauntology has implications for ideas of time, memory and the legacies of history more generally. As Loevlie observes: 'To live is to be haunted. Our "here and now", our material presence, is never stripped, bare or alone. Neither is our subjectivity. We are always caught up in invisible and intangible webs of the past, of the Other, of the future, of death' (Loevlie 2013: 337). In thinking through these issues, theorists of heritage have begun to critically think through the concept of 'absent heritage' and the need to presence the absence (Harrison 2013; Micieli-Voutsinas 2016). Harrison once again has provided insights into some of these theoretical challenges in his suggestion that 'Absent heritage... has developed as a significant global cultural phenomena in which the visual and aesthetic language of heritage conservation is applied to the conservation of voids or absent spaces to maintain an "absent presence"' (Harrison 2013: 169).

Hillier indirectly deliberates over the importance of absent heritage in her discussions of the Newmarket Saleyards and Abattoir in Melbourne, and of the current memorialisation of cows in these sites. She argues for a new form of 'hot heritage' conservation practice that brings life to multiple times and histories and different narratives of the abattoirs. Moving beyond a sanitised and safe memorialisation of the abattoirs, Hillier calls for an alternative politics of remembering which encourages conservationists to represent the 'anguished face of the cows' in their journey

towards their slaughter (Hillier 2013: 865). Thus, Hillier contends that we must view heritage ‘not as an assemblage of passive objects, but as having a “life” of its own and “characteristics of its own, which we must incorporate into our activities in order to be effective, rather than simply understanding, regulating and neutralizing it from outside”’ (Hillier 2013: 868).

Drawing upon these various positions, we use a strategy of remembering to give meaning and indeed value to the past and the remaining and sometimes unacknowledged contemporary practices of human dwelling on and alongside the Yangtze River. While the history and cultures we describe have predominantly disappeared their ghosts and traces exist in the present; these traces deserve to be part of contemporary conservation efforts to protect the ‘heritage’ of the river.

Although it is literally impossible to cover the long history of the many cultural settlements that have dwelled on the Yangtze, in the historical discussions that follow we draw upon a selection of writers from the nineteenth century, including colonial authors, travellers, academics, geographers and missionaries, all of whom actively sought to chart and document the many activities that took place on the Yangtze. In some instances, we also draw upon Chinese sources, including writing by Chinese historians. We counter hegemonic discourses running through the colonial texts, but explore their interesting and detailed insights into the life of the people and the cities that reside next to the Yangtze. The following historical analysis is therefore highly selective, in order to illustrate a historical culture of dwelling on and alongside the Yangtze.

An early historical commentary from the southern Song dynasty (1127–1279) scholar, administrator and poet, Lu You (1125–1209) documents a culture of living on the river. After a trip to Lushan Mountain, on a tributary of the Yangtze, Lu You made the following notes:

Moving out into the big river, we met a raft made of wood and measuring over ten or more chang across [a chang is 3.3 m] and over fifty chang long. There were thirty or forty houses on it, complete with wives and children, chickens and dogs, mortars and pestles. Little paths ran back and forth and there was even a shrine—I’ve never seen anything like it. The boatmen tell me that this is actually a rather small raft. The big ones sometimes have soil spread over the surface and vegetable gardens planted, or wine shops built on them. They are unable to enter the coves but travel on the big river (Lu You quoted in Lynn 1979: 65–66).

In the 1840s, Évariste Huc also refers to these floating rafts or ‘floating Islands’ in the second volume of his *Journey through the Chinese Empire*:

We passed several floating islands, those curious productions of Chinese ingenuity, which no other people seemed to have of. These floating islands are enormous rafts, generally constructed of bamboos, which resist the decomposing influence of the water for a long time. Upon the raft is laid a tolerably thick bed of vegetable soil; and thanks to the patient labors of a few families of aquatic agriculturalists, the astonished traveller beholds a whole colony lying on the surface of the water – pretty houses with their gardens, as well as fields and plantations of every sort (Huc 1855: 96)

Zhang, in *Coping with Calamity* (2015), (an environmental history of central China), points to a series of ‘Fengtian’ or ‘floating fields’ (in the Qing dynasty) around the areas of Mianyang, Hanchuan and the ‘residents of the lower reaches of the Han

River' (Zhang 2015: 119); in this work, Zhang states that these floating fields or Jiao rafts 'were common in this region and can be understood as a way of dealing with frequent floods' (Zhang 2015: 119). As scholars have pointed out, then, these rafts were common right up until the middle of the twentieth century (Ball 2016: 29). In addition, an enormous number of junk boats or sampans (a mutated expression from the Mandarin san ban, 三板 meaning three planks) and wupans (from the Mandarin Wu ban, 五板 meaning five planks) were not simply a means of transport, but were literally homes for families and sites of economic activity (Chetham 2002: 66–67); as Chetham reports for 'over a thousand years, junks offered a lively variety of services to other boats and towns in remote areas all along the Yangtze' (Chetham 2002: 66). Many of the larger junks were also theatres where 'Actors and musicians performed operas, acrobatics and magic acts' (Chetham 2002: 66); furthermore, junks served as shops, restaurants, tea houses and grocery stores, and some 'sold vegetables and pigs to passing boats' (Chetham 2002: 67). From sing-song sampans, young women serenaded 'hardy boatmen' who spent their money 'in the free and easy way peculiar to the sailing-ship sailors of bygone days' (Chetham 2002: 67 quoting Cornell Plant 1921; see also Ball 2016: 136). Junks came in enormous variety and were connected to local geographic areas along the Yangtze; as the very large tome *The Junks and Sampans of the Yangtze* (1971) (written by a retired river inspector of the Chinese maritime customs) attests, the vessels were based on a 'main structural principle of junk design, which depends for its strength upon a system of bulkheads interspersed with frames or timbers' (Worcester 1971: 29), and often the sails were made from either 'canvas or cloth' (Worcester 1971: 58). Junks were often decorated to suit their owners 'religion, mythology and symbolism' (Worcester 1971: 31). Worcester also points to the sheer craftsmanship embodied in the junk and its navigability (see also Ball 2016: 137) (Fig. 1).

When junk boat crews met rapid waters, they also employed trackers, teams of men (sometimes as many as 200) who took them over the rapids with bamboo lines and harnesses (Worcester 1971: 51). This was tough and dangerous work. Trackers were often directed by the beat of a drum from the junk (Worcester 1971: 52) and as Ball suggests some of the trackers were even whipped by gangers to "'encourage" the exertions' (Ball 2016: 37). [Tracking has a long history and might well have its origins in the Tang era (618–907) or even earlier (see Van Slyke 1988: 121; Ball 2016: 36)] (Fig. 2).

Eastern Sichuan boatmen—boat labourers, rowers and trackers—also developed a rich culture of work songs, or haozi, which Chabrowski identifies 'as tools for their work and a means of group integration' (Chabrowski 2013: 15). The songs allowed the boatmen to coordinate their movements, mentally map the geographies of the river and express their sorrows over their menial work and even their fears of death (Chabrowski 2013).

To be sure, a great deal of the cultural heritage of dwelling on the Yangtze has eroded. While sampans do in fact remain on the Yangtze—Butler (2004:2) points to the continued existence of 'Boatmen in their sampans'—they appear to be very different in terms of their form and function (we will discuss this later). Writing in 1967, Worcester reported that the steamer had a 'great effect on the junk' as did

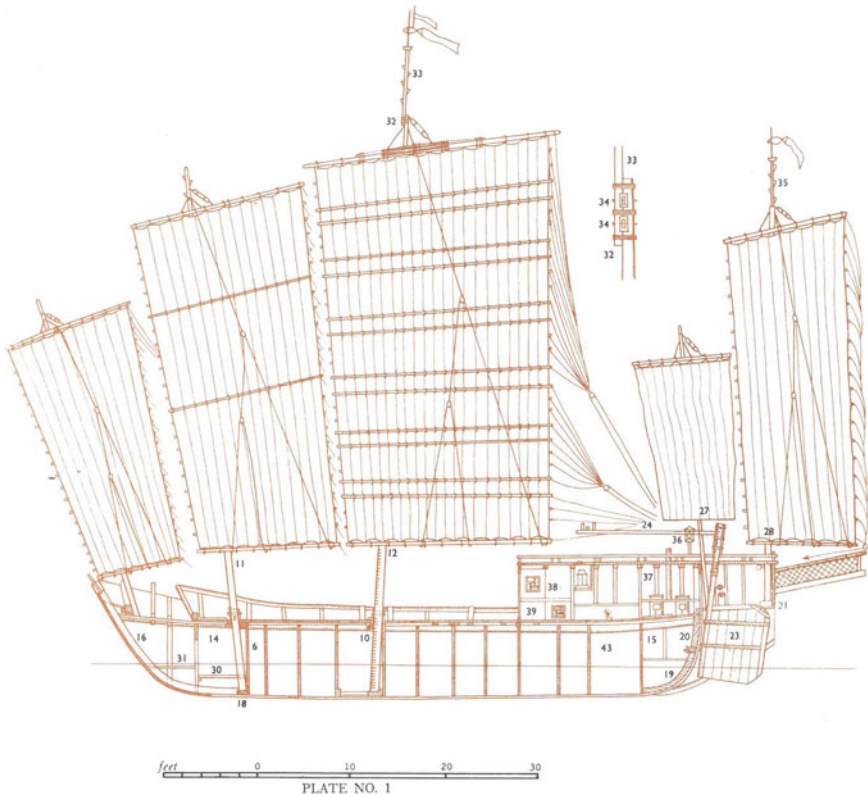


Fig. 1 Picture of one of the designs for a junk from the Yangtze Estuary (and Shanghai area) known as the ‘The Sha-Ch’uan or Kiangsu Trader’; Worcester (1971) plate no: 1: page 163; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence

a ‘large-scale programme of road construction throughout the country, [which]... conveyed the trucks of Mr. Henry Ford and Mr. Dodge’ (Worcester 1967, published in 1971). More recently, the Three Gorges Dam has restricted much small shipping in area (Chetham 2002: 249). Many of the practices associated with tracking ceased in the 1950s when the rapids were dynamited, and there is only small evidence of it being practised by locals today. (Ball 2016: 37). In 1998, Ding Qigang reported some evidence for the practice of tracking in the modern era (Qigang 1998: 88). However, commentators such as Butler suggest that tracking probably continued until the ‘last of the sailing vessels left the river in 1972’ (Butler 2004: 146).

However, in her work *Yangtze Remembered* (2004), Butler depicts a tracker named Mr. Wang (see Fig. 3), who worked on the river between 1936 and 1972. Butler’s text hints at the endless loss that has taken place along the Yangtze, but shows that the ghost of tracking still remains. Mr. Wang is said to be able to remember ‘the chants the trackers sang to help them pull in unison’ (Butler 2004: 19). Later on, Butler suggests that Mr. Wang is the last of his kind, the last remnant of a rich culture



Fig. 2 Image of trackers from Worcester (1971); page 5 entitled 'Hauling a junk over the Yeh T'an. The extra tracking hawser can be seen, as can the sampan which supports the bamboo rope; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence'

of practice and dwelling now almost out of memory: 'after he retired and his fellow tracker friends had died, occasionally he rowed himself into the current of the river, singing the old tracking songs and hearing them echo from the cliffs' (Butler 2004: 146).

Here, we now turn from the past to the present; and as well as western travel writing and photography, we also draw upon Chinese sources including talks by Chinese officials, tourist agents and a local cultural photography club. Our own research shows that although the practices of sampan sailing and tracking are no longer the traditional daily work of everyday people, to a large extent these practices have continued for the benefit of tourists. Traditionally, sampans along the Shennong Stream would transport goods daily between Dongba Town on the south bank and Yandu River Town (沿渡河镇) on the north bank branch of the Yangtze River. As the undersecretary of the Dongba Tourism Bureau of Hubei Province has stated, people 'living in the north rel[ied] on the "peapod boat" [a local name for the sampan; see Fig. 4]. They need[ed] industrial goods like salt, cloth, matches and soap from Dongba Town and their agricultural products can also be sold to the south area, such

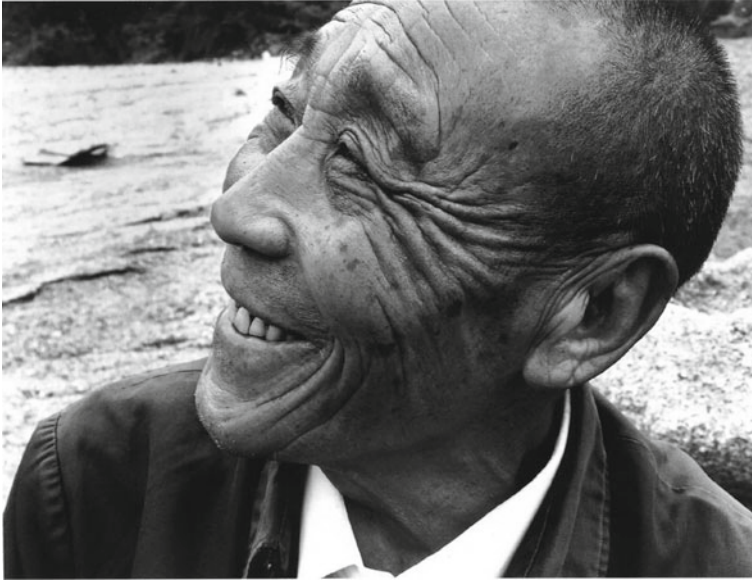


Fig. 3 Picture of Mr. Wang; used with permission from Butler (2004): plate 6; page 19; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence

as corn, pigs and sweet potatoes'. Traditionally, more than 100 sampans worked on this water traffic route (Jiang 2016).

Each peapod boat was about 13 m long and around 2 m wide and took six people to operate: four in the front and two in the rear. When it reached shallow water, the boatmen would get out and tow the boat up the river with bamboo ropes (tracking). After the construction of the Three Gorges Dam, the water rose and the practice of sailing and tracking, to transport goods, ceased. But in recent years, the traditional practices of sailing and transporting goods were replaced by a new sampan culture indeed, approximately 600 sampans and 700 trackers (Wuhan Evening Paper 2017) have been serving tourists along the river. Alongside regular tracking displays, at one site members of the Tujia ethnic minority community (one of the 56 ethnic groups said to make up the multi-ethnic Chinese state) perform the tracking naked. Traditionally, the Tujia trackers often worked naked in this region because their clothes would get wet and gain weight as the trackers worked in and alongside the river; specifically, their clothes and the bamboo ropes used to haul the boats would chaff against their skin. Today, nakedness is a tourist attraction: 'naked trackers' have attracted and fascinated visitors and tourists alike, especially foreigners and shutterbugs (Changjiangshangbao 2010). Whilst the authors of this chapter, have not conducted any ethnographic work into the status of the naked trackers, we are cognizant of the possibility that the Tujia ethnic group might be subject to particular kinds of hegemonic ethnic majority discourse. As Xie and others have pointed out, Chinese ethnic minorities have often been subject to a 'Sinocentric' or 'Han gaze'



Fig. 4 Image of a peapod boat. Photograph taken by Jiafa Xiao and used with his permission. Photograph taken 12 September 2010; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence

which positions ethnic minorities as exotic and/or primitive (Xie 2011: 101–103; see also Liu 2013) (Fig. 5).

In a travel video created by Chen (2016), the local tour guide Fuyan Zhang, who belongs to the Tujia ethnic minority, explained that the boat workers in the Shennong Stream area now earn their livelihood in three ways: they row the peapod boats and conduct tracking performances for the tourists; they fish and plant; and as the income from tracking performances is relatively low, young people go to the city to work (Chen 2016). Rather than skills and practices that get handed down to the next generation, sampan boating and tracking remain with the older generation. Currently, the oldest sampan boatmen and trackers are more than 80 years old, and the youngest are approximately 50 years old (Jiang 2016). Arguably the new performative simulacra tourist version of the sampan-tracking heritage of the Shennong Stream is the trace or ghost of something that *was*: a whole way of life that is now lost (Figs. 6 and 7).

Similarly, Chabrowski suggests that tourism has affected the song (song as in music, as opposed to Song dynasty heritage) heritage of eastern Sichuan boatmen: 'the rapidly expanding local tourist industry [has also] participated in returning songs to prominence by making them attractive, accessible and "suitable for" the broader middle-class tastes of the *gaige kaifang* ("reform and opening") generations of consumers' (Chabrowski 2013: 15). At the same time, Chabrowski has noted that their songs have been appropriated by the 'new political centre of Chongqing Municipality (Chongqingshi) in order to construct a distinctive local culture integrated into the



Fig. 5 Naked trackers. Photograph taken by Jiafa Xiao and used with his permission. Photograph taken 12 September 2010; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence

framework of a whole encompassing Chinese culture as an “intangible heritage” (Chabrowski 2013: 15). Ultimately, these initiatives have ‘broken the link between the workmen and their culture’ (Chabrowski 2013: 15).

Conclusion

Life on the river has changed so much that the simple reconstruction of these practices through touristic endeavours might fail to capture the very varied and intimate habits and ways of living associated with this rich heritage. How then to conserve it? As we shall suggest now, one an augmented reality conservation approach might be one option.

Augmented reality heritage is taking off in a range of settings, from museums to actual heritage sites (Reading 2003; tom Dieck and Jung 2017; Unger and Kvetina 2017), and promises to easily connect people to large historical and memorial resources. Tom Dieck and Jung have defined augmented reality as ‘the digital overlay of information on users’ immediate surroundings, using devices such as mobile phones or head-mounted displays (HMD) and smart glasses in particular’



Fig. 6 Image of tourists being carried along by the trackers. Photograph taken by Jiafa Xiao and used with his permission. Photograph taken 23 April, 2017; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence



Fig. 7 Picture of the naked trackers passing some washerwomen, staged by the Baren Photography Club (巴人摄影俱乐部), a social club that is separate from the local government. Photograph taken by Jiafa Xiao and used with his permission. Photograph taken 12 September 2010; released under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International Licence

(tom Dieck and Jung, 2017: 111; see also Buhalis and Yovcheva 2015). AR browsers allow visitors visiting heritage spaces to use digital devices such as smart phones and/or tablets to access visual or written information; AR markers, actual objects or images in the real world, then trigger 3D virtual information on digital devices.

One of the earliest cultural heritage sites helped by this technology was the ancient temple of Olympia in Greece, where researchers formulated the ArcheoGuide AR system (Buhalis and Yovcheva 2015). Today, the digital technology company Moptil (working in partnership with academics) offers tablets to visitors to the site (and a range of other sites including the Acropolis, Delphi, Knossos, the Asclepieion in Kos and Lindos), allowing them to experience a 3D panorama of an assortment of reconstructed remains and imagined ancient figures (virtual avatars) associated with the space. Their website boasts that ‘users have the opportunity to see in Real Time ancient Greeks walking and talking. Also interiors of temples are enriched with human activity in order to reveal the use of every temple’ (Moptil 2017). In the Yangtze area, these technologies could be used to offer historical information at a number of sites, or AR 3D display markers could be placed in a selection of real-world sites along the river (and maybe actually on the river) to convey augmented images of floating fields, sampans and trackers. Likewise this technology could be used to generate images of towns, river banks or landscape lost to industrial development.

Such technologies might also be useful in strategies aimed at getting locals, visitors and perhaps even policy makers to reflect on the deep cultural histories, crafts, morphologies and practices that have always already haunted the river and the people who have lived on and adjacent to it. Such technologies might therefore allow for both hot experiences and critical and political reflection. But ultimately these technologies, which could allow us to view spectral images of the past, also hint at a way of representing a heritage that is absent, but whose ghostly trace haunts the present.

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